



Factors That Influence Unsafe Actions On Workers At Pt. Prima Abadi Jaya Medan In 2023

Usaha Satria Pratama Tarigan¹, Gerry Silaban², Taufik Ashar³

¹Master Student, Faculty of Public Health, Universitas Sumatera Utara, Medan, Sumatera
Utara, Indonesia

^{2,3} Faculty of Public Health, Universitas Sumatera Utara, Medan, Sumatera Utara,
Indonesia

Email: usahasatriatarigan@gmail.com

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Abstract

Unsafe action is one of the causes of work accidents such as carelessness, not adhering to regulations, not obeying the standard of work procedure, not wearing PPE (Protective Personal Device), and fatigue (Istih, 2017). The data from the Japan Industrial Safety & Health Association in the US revealed that there were 10,000 cases of fatal accidents and more than two million cases of injury each year with the loss of more than 65 billion American dollars. Based on the data from BPJS, it was found that in 2020 there were 35,291 cases

(with the proportion of 42.2%) of work accidents in West Java (BPJS of Manpower, 2022). The objective of this research was to analyze several factors which influence unsafe action in the employees of PT Prima Abadi Jaya, Medan, in 2023. The research used observational analytic method with cross sectional design. The population was 120 employees, and 51 of them were used as the sample, taken by using inclusion and exclusion criteria. The research instrument was questionnaire. The data were analyzed by using univariate, bivariate, and multivariate analyzes with Spearman test with linear regression test and enter method. The results of the research showed that there was the influence of knowledge ($p < 0.001$), attitude ($p < 0.001$) supervision ($p < 0$, and K3 training ($p < 0.005$), but there was no influence of the length of service ($p > 0.222$) and K3 socialization ($p > 0.108$). The conclusion was that knowledge, attitude, supervision, and K training had significant influence on the employees' unsafe action. Meanwhile, knowledge and supervision had the most dominant factors which influenced the employees' unsafe action at PT PAJ, Medan.

Keywords : Unsafe Action, Knowledge, Attitude, Supervision, Length of Service, Training, Socialization

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Introduction

RI Law No. 1 of 1970 concerning Work Safety has regulated the implementation of K3 in all workplaces with the aim of ensuring that the safety of workers and other people in the workplace is guaranteed, equipment, sets and production resources can be used safely and efficiently to avoid work accidents and occupational illness. Apart from that, Republic of Indonesia Law no. 2 of 2017 concerning Construction Services mandates the provision of construction services that are in line with values security, safety, health and sustainability.

Construction is one of the most dangerous industries worldwide according to *Choudhry and Fang*, 2008, in China the number of victims in building construction increased significantly from 547 cases to 840 deaths in 2018 in China (Mohurd, 2019). According to the Bureau of Labor Statistics (*BLS*) of the United States Department of Labor in 2020, as many as 4,764 workers in the United States experienced fatal work accidents and in the same year the private construction industry contributed 1,008 deaths or 21.2% of the total deaths (US Bureau of Labor Statistics, 2020).

The International Labor Organization (ILO, 2018) states that more than 1.8 million work-related deaths occur every year in the Asia and Pacific region, more than 250 million work accidents. *The International Labor Organization* (ILO) also reports that every day, around 860,000 workers experience work accidents and work-related diseases throughout the world and 6,400 workers die due to work accidents and work-related diseases.

Every day there are approximately 12 workers in Indonesia who experience permanent disabilities and 7 workers die as a result of accidents at work with the largest work accidents being in the manufacturing and construction sector at 63.6%, transportation sector 9.3%, forestry sector 3.8 %, mining 2.6% and the remaining 20.7% which is recorded at the Social Security Administering Agency (BPJS Employment, 2020).

Based on data released by BPJS Employment, the number of work accident cases in Indonesia has tended to increase and decrease over the last five years. In 2016 the number of work accidents



was recorded at 101,368 cases with total claims reaching IDR 833.44 billion. In 2017 there were 123,041 work accident cases with total claims of IDR 971.62 billion. Then, in 2018 there were 173,415 work accident cases with total claims of IDR 1.22 trillion. Then in 2019 there was a decrease in the number of accidents which is estimated to have occurred at 114,000 cases with claims of IDR 1.09 trillion. However, the number of work accidents since the 2020 to 2022 pandemic has increased by around 200,000 cases. It can be seen that in 2020 there were 221,740 work accident cases, while in 2021 it reached 234,270 cases, and until November 2022, the number of work accidents reached 265,334 cases. Throughout 2020, there were 35,291 cases (with a proportion of 42.2%) of work accidents recorded in West Java. The majority of accidents occur due to human error which causes material and moral losses for both companies and workers. (BPJS Employment, 2022).

Unsafe behavior is one of the major contributors to accidents in the construction sector, and around 80%-90% of construction accidents in China are due to unsafe behavior among construction workers. According to research conducted in China, there were 377 cases of construction accidents caused by unsafe behavior (Pinsheng, 2021).

Accidents that occur in the workplace are generally caused by two things, namely human actions that do not meet safety requirements (*unsafe actions*) and unsafe working conditions (*unsafe conditions*). According to Heinrich in his research, it was found that 88% of accidents that occurred in the work environment were caused by unsafe actions by humans (*unsafe actions*), 10% were caused by unsafe working conditions (*unsafe conditions*) and the other 2% were caused by fate God (Salim, 2019).

One of the factors that influences unsafe actions is knowledge. This is supported by research conducted by Larastie, 2022, regarding the relationship between the level of knowledge and unsafe actions. It was found that the majority of respondents with a low level of knowledge, there were 61 people (92.4%) who committed unsafe actions. in the workplace. Meanwhile, among respondents who had a high level of knowledge, there were 12 people (21.1%) who committed



unsafe acts in the work environment. From these results it can be concluded that there is a significant relationship between the level of knowledge and unsafe actions (Larasatie, 2022).

Apart from the knowledge factor, attitude is also a factor that influences unsafe actions. This is supported by research conducted by (Akbar, 2022) regarding the relationship between attitudes and unsafe actions. The research results obtained from the majority of respondents were 15 respondents (51.7%) have an unsafe attitude, and as many as 14 respondents (48.3%) have a safe attitude. Based on the results of the questionnaire answers, it was found that the most common unsafe behavior was repairing equipment while it was still on or operating. This is done to speed up the duration of the work so that it can be completed quickly.

According to Rahma (Listyandini, 2019) supervision in every job has the aim of ensuring that every job can be carried out according to what was planned so that the desired results are obtained. This is supported by research conducted by Rahma Listyandini, 2019 with the results that the proportion of unsafe acts in the high category among respondents who considered supervision good (9.2%) was 2 times smaller than respondents who considered supervision poor (18.5%). Statistically there is a significant relationship between unsafe actions and supervision because p-value $(0.000) < \alpha (0.05)$.

According to (Prasetya, 2018) states that a longer working period will affect workers' experience in recognizing dangers at the work site. A long working period can minimize the occurrence of work accidents due to mistakes made because workers will be familiar with the dangerous areas in the workplace. Research conducted by Muhammad Bagus Panuntun stated that there was a relationship between work experience and unsafe behavior. Strengthened by the results of statistical test research using somers'd with the SPSS version 25 program, it is known that there is a significant relationship between work experience and unsafe acts with a value of $p = 0.000$ or ≤ 0.05 .

Apart from that, K3 socialization is a form of effort carried out to encourage and strengthen worker awareness and behavior regarding K3 so that it can protect workers, property and the environment. Supported by research conducted by Arum Budiarti 2019, the research results



showed that as many as 18 workers (40.0%) stated that the K3 program socialization carried out was good, but the workers had experienced work accidents while working on the project. Meanwhile, among workers who stated that the socialization of the K3 program was not good, there were 28 workers (70.0%) who had experienced work accidents. The statistical test results obtained a value of $p=0.011$ and $OR=3.5$, which means that there is a significant relationship between K3 program socialization and work accidents, and poor K3 program socialization has a 3.5 times chance of work accidents occurring compared to K3 socialization. which was done well.

Currently, there are still many cases of work accidents caused by construction work that occur in the world, especially Indonesia. Work accidents that occur in construction occur because many workers work unsafely, for example workers do not use PPE, workers do not carry out work procedures that have been made, workers operate tools at inappropriate speeds, workers use incorrect equipment, workers operating equipment without authority, workers using damaged equipment, workers working while joking or playing, workers not following existing training and socialization and many other things.

The researcher's opinion is based on the theory presented by HW Heinrich which states that 88% of work accidents that occur in the workplace are caused by workers' unsafe actions directly. Based on the problems above and supported by existing theories, the researchers chose one of the large companies operating in the construction sector in North Sumatra. Where the research was carried out at PT. PAJ Prima Abadi Jaya Medan is a construction project for the Maitreyawira Cemara Asri school which is located on Jalan Cemara Asri, Sampali Village, Percut Sai Tuan District.

PT. Prima Abadi Jaya (PT. PAJ) is a company that provides construction services located at Jalan Karya Komplek Karya Minimalis No. B-5 Medan, North Sumatra Province. This company focuses on large-scale construction or development activities such as building hospitals, building industrial factories, malls, campuses, housing and others. In construction activities, there is no possibility of work accidents occurring. This can occur due to unsafe actions carried out by workers. These actions include not being careful, working while joking, not complying with



regulations according to SOP, not using PPE, and others. Based on a preliminary survey conducted on 30 male workers, there were 15 workers (50%) who carried out unsafe *actions*.

Based on this background description, researchers are interested in analyzing the factors that influence unsafe actions *among* workers at PT Prima Abadi Jaya Medan in 2023.

Methods

Types of research

This research study uses a quantitative research method with a Cross Sectional approach *where there are independent* and dependent variables *that* are studied at the same time.

Research Location and Time

This research was conducted at PT. PAJ Prima Abadi Jaya Medan is a construction project for the Maitreyawira Cemara Asri school located on Jalan Cemara Asri, Sampali Village, Percut Sai Tuan District in 2023.

Research Population and Sample

The population in this study were workers who worked at PT. PAJ Prima Abadi Jaya Medan Maitreyawira Cemara Asri school construction project with a total of 120 workers.

Based on calculations using the formula above, the minimum sample size required is 54 people.

Variable

1. Independent Variable

The independent variables in this research are workers at PT Prima Abadi Jaya including knowledge, attitudes, supervision, length of service, K3 training and K3 socialization.

2. Dependent Variable

The dependent variable in this research is unsafe *action*.



Method of collecting data

Primary data. To obtain primary data used was filling out a questionnaire, the questionnaire was designed personally by the researcher according to the independent and dependent variables.

Secondary data. Collection Secondary data was obtained from the research location according to the preliminary survey conducted by the researcher.

Method Data analysis

Univariate analysis was carried out on each variable . Bivariate analysis was carried out to determine whether or not there was a relationship between these variables using the Spearman correlation test. Multivariate tests were carried out using linear regression tests because the dependent variable was numerical data.

Results

Respondent Characteristics

Distribution of gender, age and education of respondents based on the results of interviews using questionnaires conducted on workers at PT Prima Abadi Jaya Medan in 2023 Respondent data was obtained based on gender, age and education which can be seen in Table 1 as follows:

Table 1

Distribution of Respondents Based on Characteristics at PT Prima Abadi Jaya Medan in 2023 .

Worker Characteristics	n	%
Gender	51	100
Man		
Age		
20 - 35 years old	34	66.7
36 -50 Years	13	25.5
> 50 Year	4	7.8
Education		
elementary school	2	3.9
SMP/STLP	11	21.6
high school	36	70.6
Bachelor	2	3.9



Based on Table 1, it can be seen that all of the 51 workers were male (100%), with the majority aged 20-35 years (66.7%) and the majority having a high school/high school education of 36 people (70.6%).

Univariate Data Analysis

Univariate analysis was used to see the distribution of each variable in this study. The variables whose distribution will be seen are type of knowledge, attitude, supervision, length of service, K3 training, K3 socialization and Unsafe Actions.

Based on the results of interviews using a questionnaire that were conducted with workers as respondents at PT Prima Abadi Jaya Medan in 2023 Respondent data obtained can be seen in Table 2 as follows:

Table 2

Distribution of Knowledge , Attitudes, Supervision, Work Period, K3 Training, K3 Socialization, and Unsafe Actions at PT Prima Abadi Jaya Medan in 2023 .

Respondent Characteristics	n	%
Knowledge		
Not good	36	70.6
Good	15	29.4
Attitude		
Not good	42	82.4
Good	9	17.6
Supervision	38	74.5
Not good	13	25.5
Good		
Years of service		
< 5 Years	41	80.4
> 5 Years	10	19.6
K3 training		
unfollow	34	66.7
Follow	17	33.3
K3 socialization		
Not good	36	70.6
Good	15	29.4
Unsafe Actions	51	100



Based on Table 2 of 51 workers the majority had poor knowledge, namely 36 people (70.6%), the majority of respondents had a bad attitude, 42 people (82.4%), respondents who stated that supervision was not good, 38 people (74.5%), the majority of workers with <5 years of service were 41 people (80.4%), the majority of workers 34 people (66.7%) did not participate in training, the majority of workers stated that socialization was not good, 36 people (70.6) and 51 workers who carried out unsafe actions (100%).

Bivariate Analysis

Before carrying out bivariate analysis, a data normality test was carried out first. The results of the data tests carried out can be seen in the table below:

Table 3

Data normality test results



Variable	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Years of service	0.191	51	0,000	0.860	51	0,000
Knowledge	0.442	51	0,000	0.619	51	0,000
Attitude	0.495	51	0,000	0.495	51	0,000
Supervision	0.453	51	0,000	0.599	51	0,000
Training	0.419	51	0,000	0.667	51	0,000
Socialization	0.313	51	0,000	0.841	51	0,000

After the data normality test was carried out, the test results showed that the data was not normally distributed so that the next test was carried out using the Spearman test. Bivariate analysis in this research aims to determine the influence of the independent variables on the dependent variable independently. To determine the influence between the independent variable and the dependent variable independently in this research, the Spearman test was carried out at a significance level of $\alpha < 0.05$.



Table 4

The Influence of Knowledge, Attitudes, Supervision, Work Period, K3 Training, K3 Socialization on Unsafe Actions among Workers at PT Prima Abadi Jaya Medan in 2023

Variable	R (Correlation Coefficient)	p-value	Unsafe Actions	
			Information	Strength
Knowledge	0.458	0.001	Influential	Quite Tight
Attitude	0.439	0.001	Influential	Quite Tight
Supervision	0.514	0,000	Influential	Quite Tight
Years of service	0.174	0.222	No effect	Not Tightly
K3 training	0.389	0.005	Influential	Not Tightly
K3 socialization	0.228	0.108	No effect	Not Tightly

test shows that there is a fairly close influence between knowledge and unsafe actions with a *p-value* of 0.001 .

test shows that there is a fairly close influence between attitudes and unsafe actions with a *p-value* of 0.001 .

From the table above, it can be seen that from 51 workers, carrying out the Spearman test shows that there is a fairly close influence between supervision and unsafe actions with a *p-value* of 0.00.00.

From the table above, it can be seen that out of 51 workers, carrying out the Spearman test shows that there is no influence between length of service and unsafe actions with a *p-value* of 0.222.

From the table above, it can be seen that out of 51 workers, conducting statistical tests shows that there is a slight influence between K3 training and unsafe actions with a *p-value* of 0.005.

From the table above, it can be seen that from 51 workers, conducting statistical tests shows that there is no influence between K3 socialization and unsafe actions with a *p-value* of 0.108.



Multivariate Analysis

Multivariate analysis in this research is intended to see the influence of independent variables on the dependent variable together for estimation purposes. The influence of the independent variable on the dependent variable is determined based on the *linear regression test* at the real level $\alpha = 0.05$ using the *backward method*. The selection criteria used in the analysis were determined with a *p value* < 0.25 from the results of the bivariate test analysis. Next, all these variables are used using the *backward method* were included together in the multivariate analysis. Then variables with a *p value* > 0.05 will be automatically removed from the analysis to obtain influential variables. *Linear regression* analysis results can be seen as in the following table.

Table 5
Multivariate Analysis Results

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
1	(Constant)	4,424	2,665	1,660	0.104
	Knowledge	0.237	0.152	0.281	0.125
	Attitude	0.002	0.182	0.001	0.993
	Supervision	0.773	0.204	0.472	0,000
	Years of service	0.251	0.367	0.088	0.497
	Training	0.301	0.251	0.197	0.238
	Socialization	-0.278	0.303	-0.134	0.365
2	(Constant)	4,429	2,585	1,713	0.094
	Knowledge	0.238	0.138	0.281	0.091
	Supervision	0.774	0.190	0.473	0,000
	Years of service	0.252	0.361	0.088	0.489
	Training	0.301	0.247	0.197	0.229
	Socialization	-0.277	0.296	-0.134	0.354
3	(Constant)	4,733	2,534	1,868	0.068
	Knowledge	0.252	0.135	0.298	0.069
	Supervision	0.757	0.187	0.463	0,000
	Training	0.318	0.244	0.208	0.200
4	(Constant)	3,946	2,341	1,686	0.099
	Knowledge	0.222	0.130	0.263	0.094



	Supervision	0.736	0.185	0.450	3,985	0,000
	Training	0.261	0.234	0.171	1,117	0.270
	(Constant)	4,752	2,233		2,128	0.038
5	Knowledge	0.321	0.096	0.379	3,355	0.002
	Supervision	0.744	0.185	0.455	4,019	0,000

Based on the linear regression test *with the backward method*, in step 1 the variables included in the modeling are variables (knowledge, attitudes, supervision, work period, training and socialization). In step 2, the variables included in the modeling are variables (knowledge, supervision, length of service, training, socialization and the variable that is eliminated is the attitude variable). In step 3, the variables included in the modeling are variables (knowledge, supervision, training, socialization and the variables that are eliminated are attitude variables and length of service). In step 4, the variables included in the modeling are variables (knowledge, supervision, training and the variables that are eliminated are attitude, length of service and socialization). In step 5, the variables included in the modeling are variables (knowledge, supervision and the variables that are eliminated are the variables of attitude, length of service, socialization and training).

Table 6
Final Variables in Analysis Multivariate

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	4,752	2,233		2,128	0.038
5 Knowledge	0.321	0.096	0.379	3,355	0.002
Supervision	0.744	0.185	0.455	4,019	0,000

Based on table 6 above, it can be seen that from the results of the *linear regression test using the backward method*, the final results or step 5 are obtained based on the modeling test results. The significant or dominant variables are supervision and knowledge. The final stage of the strength of the first influence is found in the supervision variable with a value of



($p=0.000<0.05$) with a value of B (0.744) and the results of the linear regression test in the final stage of the second strength of influence is found in the knowledge variable with a value of ($p=0.002<0.05$) with a value of B (0.321).

Discussion

The Influence of Knowledge on Unsafe Actions

of the statistical test obtained a *p-value* of $0.001 < 0.05$, which means that there is a significant influence between workers' knowledge of unsafe actions.

This research is in line with research conducted by Ardilla Larasatie with the title factors related to unsafe actions in PT production workers. X Year 2022 with the results of the researcher showed that there was a relationship between the level of knowledge with unsafe actions obtained by the majority of respondents with low levels of knowledge there were 61 people (92.4%) who carried out unsafe actions in the work environment. Meanwhile, among respondents who had a level of knowledge, there were 12 people (21.1%) who committed unsafe acts in the work environment. From these results it can be concluded that there is a significant relationship between the level of knowledge and unsafe actions.

Workers with a high level of knowledge will be able to distinguish and know the danger risks around them and can carry out work in accordance with existing procedures because they are aware of the risks they accept so that unsafe actions can be avoided. Meanwhile, workers with a low level of knowledge tend to ignore the dangers around them and tend to take unsafe actions because they are not aware of the risks they will receive. The higher a worker's level of knowledge, the more unsafe actions can be minimized.

The Influence of Attitudes on Unsafe Actions

The results of the statistical test obtained a *p-value* of $0.001 < 0.05$, which means that there is a significant influence between workers' attitudes towards unsafe actions .



This research is in line with research conducted by Ernyasih entitled factors related to unsafe behavior among workers at *the Canary Apartment PT* project. Abadi Prima Intikarya 2022, with research results showing a relationship between attitudes and unsafe behavior, it was found that 29 respondents with negative attitudes (74.4%) had unsafe behavior in the high category. Meanwhile, there were 14 respondents who had a positive attitude (45.2%) whose unsafe behavior was in the high category. This explains that respondents who have a negative attitude are more likely to behave unsafely in the high category than respondents who have a positive attitude. The results of the chi square statistical test showed a p value of 0.025, meaning that there was a relationship between attitudes and unsafe behavior among workers at The Canary Apartment PT Project. Abadi Prima Intikarya. From the results of the analysis, it was found that the OR (odds ratio) value was 3.5, which means that workers with a negative attitude were 3.5 times more likely to behave in the high category of unsafe behavior compared to workers with a positive attitude.

The Effect of Supervision on Unsafe Actions

The results of the statistical test obtained a p-value of $0.000 < 0.05$, which means that there is a significant influence between worker supervision and unsafe actions.

This research is in line with research conducted by Ernyasih with the title factors related to unsafe behavior among workers at The Canary Apartment PT project. Abadi Prima Intikarya 2022, with research results showing that there is a relationship between supervision and unsafe actions, it was found that 37 respondents (71.2%) behaved unsafely in the high category. Meanwhile, there were 6 respondents with good supervision (33.3%) whose unsafe behavior was in the high category. This explains that respondents with more or less supervision behave more unsafely in the high category than respondents with good supervision. The results of the chi square statistical test showed a p value of 0.01, meaning there was a relationship between supervision and unsafe behavior among workers at The Canary Apartment PT Project. Abadi Prima Intikarya.

This is also in accordance with research conducted by Bancin (2017) on workers at PT. Kharisma Cakranusa Rubber Industry workers who carried out unsafe acts with insufficient



supervision were 53.3% and based on the results of the chi square test, the p value was 0.0008, which can be concluded that there is a relationship between supervision and unsafe acts.

Supervision in the work environment is carried out to monitor workers so that they can carry out work safely, effectively and efficiently and avoid dangers that can cause work accidents. Supervisors are responsible for monitoring worker performance which is very important so that the work program can be achieved successfully. Supervisory functions that are not carried out properly can result in incidents that can disrupt company activities.

In accordance with the data obtained by researchers, the results of workers who work with safe actions are when K3 supervision is considered good and workers who work with unsafe actions are when K3 supervision is low. This proves that supervision is an important internal factor to encourage workers to behave safely. Apart from that, based on the results of data processing apart from knowledge, supervision is the main variable that most dominantly influences workers' actions while working, especially on construction work.

The Effect of Work Period on Unsafe Actions

The results of the statistical test obtained a *p-value* of $0.222 < 0.05$, which means that there is no significant influence between the worker's length of service on unsafe acts.

This research is in line with research conducted by Hasma Agustiya with the title research on Factors that Influence Unsafe Action *in* Workers in 2022. From this research, a p value of $0.490 > 0.05$ was obtained, which means there is no relationship between work with unsafe actions. This can happen because there are several causal factors found in the field, including when experiencing an accident, workers who experience an accident tend to immediately leave or stop their work and look for safer work. Another influencing factor is the uncertain working period. They count their work period from the start of work until now, but in the middle of their work period, some of them do not work at all.

The working period is the length of working time starting from the first time the worker enters work until the worker leaves his job (Sucipto, 2014). According to researchers, workers who



have worked for a long time still underestimate the dangers that exist and tend to ignore them. This is confirmed by Geller who states that experience factors in the same task and the environment are known to influence the person to behave in an unsafe manner and continue to act because it is fun, comfortable and saves time and this behavior tends to be repeated. The above statement is also reinforced by the ILO (1998) which states that long and experienced workers are not a guarantee that they will not carry out unsafe actions so as to avoid accidents. Old or experienced workers do not feel unfamiliar with their environment, if they are very familiar with it, they will become less careful, especially if an accident has not occurred for a long time, so they tend to think that the danger is not as serious as what their boss hears and says.

The Effect of K3 Training on Unsafe Actions

of the statistical test obtained a *p-value* of $0.05 < 0.05$, which means that there is a significant influence between workers' K3 training on unsafe actions .

This research is in line with research conducted by Ernyasih with the title factors related to unsafe behavior among workers at The Canary Apartment PT project. Abadi Prima Intikarya 2022 with research results showing that there is a relationship between K3 training and unsafe actions. that there were 38 respondents who had never attended training (69.1%) who behaved unsafely in the high category. Meanwhile, 5 respondents (33.3%) who had attended training had unsafe behavior in the high category. This explains that respondents who have never attended training have more unsafe behavior in the high category than respondents who have attended training. The results of the chi square statistical test showed a *p value* of 0.026, meaning that there was a relationship between training and unsafe behavior among workers at The Canary Apartment PT Project. Abadi Prima Intikarya.

In this research, the training referred to is training in techniques for using occupational safety and health equipment and several work procedures that must be carried out by each worker to prevent work disturbances or accidents. According to researchers, training activities need to be prioritized for workers, which can be done with refresher programs such as *safety talks*, *safety*



training, toolbox meetings and others. In accordance with this research, it shows that there is a statistically significant influence between K3 training and unsafe behavior. Workers who do not receive training have a greater tendency to behave unsafely compared to workers who receive training. Having refreshments such as holding *Safety Talks, Safety Training, Toolbox Meetings* before work and providing PPE that meets the requirements can minimize the possibility of unsafe actions occurring.

The Influence of K3 Socialization on Unsafe Actions

The results of the statistical test obtained a p-value of $0.108 < 0.05$, which means that there is no significant influence between K3 Socialization and unsafe acts.

This research is in line with research conducted by Anisa Aprilianti with the title Factors Associated with Unsafe Action *in* Workers at PT. Maruki Internasional Indonesia Makassar 2022. From the cross tabulation between the relationship between socialization and unsafe actions, it is known that from 50 workers it was found that those who had low levels of unsafe actions and also participated in good socialization were 21 workers (45.7%) and workers who had high levels of unsafe actions. high level of insecurity and did not participate in socialization well, namely 25 workers (54.3%). Meanwhile, there are 4 workers who have low levels of unsafe actions and have participated in little socialization, namely 4 workers (100%) and workers who have high levels of unsafe actions and have not participated in less socialization, namely 0 workers (0%). The results of data research using the chi-square test with a confidence level of 95%, a decision can be made, namely the sig-p value is $0.118 > 0.05$, then H_0 is accepted, meaning there is no relationship between socialization and unsafe actions. Based on the research results, the percentage of respondents who committed unsafe acts was lower when socialization was poor, compared to when socialization was good.



Factors That Most Influence Unsafe Actions

Knowledge

According to researchers, one of the causes of work accidents is unsafe actions caused by a lack of knowledge. Workers with high knowledge have the ability to distinguish and identify dangerous risks that exist in the workplace, especially at PT. PAJ Medan, as well as workers can carry out work in accordance with existing procedures because workers are aware of the risks they face, so that unsafe actions can be avoided. On the other hand, workers with a low level of knowledge tend to ignore the dangers around them and carry out unsafe actions due to a lack of understanding of the risks that may occur. So the researchers drew a conclusion that the higher the level of knowledge of a worker, the more unsafe actions can be minimized.



Supervision

The results of this research are in line with Lawrence Green's theory which states that supervision is included in the motivating factors (*reinforcing*) in influencing a person's behavior or actions. Then Heinrich's theory in Desmayani (2020) states that supervision is included in the 10 work safety axioms which are the key to preventing work accidents caused by unsafe actions. Supervision in the work environment is carried out to monitor workers so that they can carry out their duties safely, effectively and efficiently and avoid potential dangers that could cause work accidents. The supervisor's responsibilities include monitoring employee performance, a crucial aspect for achieving a successful work program. If the supervisory function is not carried out properly, this can result in incidents that can disrupt the course of company activities.

In this research, supervision is categorized into 2, namely good supervision and poor supervision. The reason the researchers determined this supervision was because PT. PAJ Medan is a company in the construction sector which is considered to have high work risks so good work supervision is needed. Based on the results of multivariate analysis using *linear regression tests using the backward method*, it is known that the variable that has the first highest significant



influence is the supervision variable on unsafe acts among workers at PT.PAJ Medan in 2023, the supervision variable is the first highest variable among the other variables. This is influenced by the lack of monitoring of the work environment carried out by the company.

Conclusion

Based on the results of research carried out to carry out an analysis of factors influencing unsafe actions (unsafe actions) among workers at PT Prima Abadi Jaya Medan in 2023, several conclusions can be drawn, namely that there is a significant influence between workers' knowledge of unsafe actions in PT Prima Abadi Jaya Medan with a value (p-value 0.001). There is a significant influence between workers' attitudes towards unsafe actions at PT Prima Abadi Jaya Medan and the value (p-value 0.001). There is a significant influence between worker supervision on unsafe actions at PT Prima Abadi Jaya Medan and the value (p-value 0.000). There is no significant influence between the length of service of workers on unsafe acts at PT Prima Abadi Jaya Medan and the value (p-value 0.222). There is a significant influence between worker K3 training on unsafe actions at PT Prima Abadi Jaya Medan with a value (p-value 0.005). There is no significant influence between workers' K3 socialization on unsafe actions at PT Prima Abadi Jaya Medan and the value (p-value 0.108). The variable that is dominant or has the most influence on unsafe actions at PT Prima Abadi Jaya Medan is knowledge with a value of (p=0.002) and the supervision variable with (p=0.000).



References

- Akbar, M. F. S., Putri, E. C., Yusvita, F., & Rusdy, M. D. R. (2021). Hubungan Pengetahuan Dan Pengawasan Dengan Perilaku Tidak Aman Pada Pekerja Bekisting Pt Beton Konstruksi Wijaksana Tahun 2020. *Iakmi Jurnal Kesehatan Masyarakat Indonesia*, 2(2), 61-72.
- Annisa, E. (2019). Faktor Yang Berhubungan Dengan Tindakan Tidak Aman Pada Pekerja Bagian Produksi Di PT. Pupuk Iskandar Muda Aceh Tahun 2019 (Doctoral dissertation, Institut Kesehatan Helvetia).
- Bancin AM. Faktor-faktor yang mempengaruhi tindakan tidak aman (*unsafe action*) pada pekerja di PT. Kharisma *Cakranusa Rubber Industry* Tahun 2016 [Internet]. Sumatera Utara; 2017. Tersedia pada: <https://repositori.usu.ac.id/handle/123456789/1788>
- Biro Statistik Tenaga Kerja Amerika Serikat, 2020
- BPJS Ketenagakerjaan. (2020). <https://www.bpjsketenagakerjaan.go.id/>.
- Ernyasih, E., Rahmawati, T., Andriyani, A., Fauziah, M., & Lusida, N. (2022). Faktor-Faktor Yang Berhubungan Dengan Perilaku Tidak Aman Pada Pekerja Proyek The Canary Apartment PT. Abadi Prima Intikarya Tahun 2022. *Environmental Occupational Health And Safety Journal*, 3(1), 45-54.
- Ernyasih, Rahmawati, Andriyan, Fauziah, Lusida. (2022). Faktor - Faktor Yang Berhubungan Dengan Perilaku Tidak Aman Pada Pekerja Proyek The Canary Apartment PT. Abadi Prima Intikarya Tahun 2022, *Environmental Occupational Health and Safety Journal*.
- ILO. (2018). Meningkatkan Keselamatan dan Kesehatan Pekerja Muda.
- ILO. (2020). *World Statistic: The enormous burden of poor working conditions*. https://www.ilo.org/moscow/areas-of-work/occupational-safety-andhealth/WCMS_249278/lang--en/index.htm
- Larasatie, A., Fauziah, M., Dihartawan, D., Herdiansyah, D., & Ernyasih, E. (2022). Faktor-Faktor Yang Berhubungan Dengan Tindakan Tidak Aman (Unsafe Action) Pada Pekerja Produksi PT. X. *Environmental Occupational Health and Safety Journal*, 2(2), 133-146.
- Larasti, A., Fauziah, M., di hartawan., Herdiansayah, D, Ernyasih. (2022). faktor-faktor yang berhubungan dengan tindakan tidak aman (*unsafe action*) pada pekerja produksi PT. X. *jurnal*.
- Listyandini, R. (2019). Faktor Yang Berhubungan Dengan Tindakan Tidak Aman Pada Pekerja DiPabrikPupukNpk.Hearty,7(1). *Jurnal*.
- Mohurd (2019), “*Accident reports [online]*”, available at: <http://sgxxxt.mohurd.gov.cn/AccidentList.aspx> (accessed 30 November 2019).



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- Pinsheng., D., ianliang., Z. (2021). *Cascading vulnerability analysis of unsafe behaviors of construction workers from the perspective of network modeling.*, School of Mechanics and Civil Engineering, China University of Mining and Technology, Xuzhou, China.journal.
- Prasetyo, A. Y., Fathoni, A., & Malik, D. (2018). Analisis Pengaruh Konflik Keluarga-Pekerjaan, Hardiness, Self Efficacy terhadap Stress Kerja dengan Dukungan Sosial sebagai Variabel Moderasinya (Studi pada Guru Demak). *Journal of Management*, 4(4).
- Selim., Baradan., Seyyit Umit Dikmen., Kale, O.K (2018): *Impact of Human Development on Safety Consciousness in Construction*, *International Journal of Occupational Safety and Ergonomics*, DOI: 10.1080/10803548.2018.1445069. Penerbit: Taylor & Francis & Central Institute for Labour Protection – National Research Institute (CIOP-PIB).
- Sucipto, C. D. (2014). *Keselamatan dan Kesehatan Kerja*. Yogyakarta: Gosyen Publishing.



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